

Work Order ID 133557

133557

Page 1

Wednesday, June 10, 2015 12:43:27 PM

Item ID: D4983-041 Accept ***N19000040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Cargo Hook Assembly
 Start Date: 6/10/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 6/10/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: ML5 Date: JUN 10 2015 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4983	F

100 0.00

100

Purchasing

Purchasing

Memo

ISSUE PO: 29013
 TO: RED BARN (DART EUGENE)
 C OF C IS REQUIRED

0.00

CZ JUL 02 2015 1

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Packaging

Memo

0.00

1x SP 15-08-17

120

QC5- Inspect part completeness to step on W/O

0.00

120

QC

Quality Control

Memo

0.00

ENSURE THAT D5066-1/-13 PLACARDS ARE INSTALL

REF. RED BARN BATCH #: 01-16263-A-18

①

DAS
38
9-89

AUG 25 2015

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only

Work Order: _____						DISPOSITION						AGAINST DEPARTMENT/PROCESS																							
						Rework ☐						Skid-tube ☐			Cross tube ☐			Water Jet ☐			Engineering ☐														
Part No. _____						Scrap ☐						Machining ☐			Small Fab ☐			Prod. Eng. Coord. ☐			Quality ☐														
						Use-as-is ☐						Thermoforming ☐			Finishing ☐			Rec/Store/Packaging ☐			Other ☐														
NCR No.						Suspected Unapproved ☐						Large Fab ☐			Composite ☐			Supplier ☐																	
Date :						Step #:						QTY Effective :						MRB (QS1042) Approval																	
Description Work Order Deviation												Disposition												Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval											
Root Cause												FAULT CATEGORY																							
Environment ☐ No Re-verification ☐												Pressure/Forced ☐						Temperature/Cure ☐						Power Loss/Surge ☐						Positioned Wrong ☐					
Design ☐ Operator ☐												Bending ☐						Set-up ☐						Folio/Program ☐						Outside Dimensions ☐					
Doc/Data ☐ Offset/Set up ☐												Centre Not Concentric ☐						BOM/Route ☐						Grain ☐						Over/Under tolerance ☐					
Equip/Tooling ☐ Supplier ☐												Cracks ☐						Broken/Damage/Defect ☐						Weld ☐						Part Incorrect ☐					
Handling/Pre ☐ Training ☐												Crimp/Kink/Ripple/Wave ☐						Inspection Incomplete/Unqualified ☐						Wrong Stock Pulled ☐						Part Lost/Missing ☐					
Material ☐ Use for Testing ☐												Cuffs ☐						Contamination ☐						Out of Sequence ☐						Part Moved ☐					
Internal Transport ☐ Poor Information ☐												Crushing ☐						Countersink ☐						Off-set ☐						Drawing ☐					
Tribal Knowledge ☐ Rushing ☐												Heat Treat ☐						Cut Too Short ☐						Mislabeled ☐						Finish ☐					
LOA ☐ Product Improvement ☐												Wave/Twist in Tube ☐						Instructions Incomplete/Unclear ☐						Fit/Function ☐						Misread ☐					
Substation ☐ Process Improvement ☐												Marks/Chatter ☐						Drill Holes ☐						Misaligned/off center ☐						Turning Sequence ☐					
Past Expiry Date ☐ Manufacturing Process ☐												OTHER : _____																							
Misidentified ☐ Past Due ☐																																			

Work Order ID 133557

133557

Page 2

Wednesday, June 10, 2015 12:43:27 PM

Item ID: D4983-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Cargo Hook Assembly
 Start Date: 6/10/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 6/10/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>51462</u>	0.00				<u>27</u>			
130						<u>9-89</u>			
Packaging	Memo	0.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

AUG 28 2015

AUG 28 2015

20150828

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Wednesday, June 10, 2015 12:43:30 PM

Page 1

Work Order ID: 133557

133557

Parent Item: D4983-041

D4983-041

Parent Item Name: Cargo Hook Assembly

Start Date: 6/10/2015

Required Date: 6/10/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 14-03-022 JLM VERIFIED BY:DD IPP
REV:B 15.03.26 AS PER DWG REV.F DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4983-041P		Purchased		No			Each	0.0000					

D4983-041P

Cargo Hook Assembly

**

1
1X SP 15-08-17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

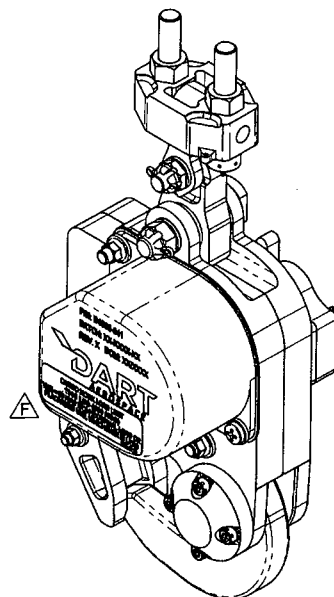
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4983-041	CARGO HOOK ASSY
1	1	D4984-041	HOOK SIDE PLATE ASSY
2	1	D4985-041	HOOK SIDE PLATE ASSY
3	1	D4986-1	CARGO HOOK LOCK
4	2	D4987-1	DUST SHIELD
5	1	D4988-1	KEEPERLESS ADAPTOR
6	1	D4989-1	LATCH SHAFT
7	1	D4990-041	ACTUATOR ASSEMBLY
8	1	D4991-1	LATCH ROLLER PIN
9	1	D4992-1	LATCH ROLLER
10	1	D4993-1	LATCH ROLLER DU BEARING
11	1	D4994-1	LATCH
12	2	D4995-1	ACTUATOR BUSHING
13	1	D4996-041	HOOK ASSEMBLY
14	1	D4997-1	LOAD BEAM BUMPER
15	2	D4998-1	LOCK BUMPER
16	1	D4999-1	CLOCK SPRING COVER
17	1	D5000-1	CLOCK SPRING
18	1	D5001-1	LOCK SPRING
19	2	D5002-1	LINK PIN
20	1	D5003-1	LINK
21	1	D5005-1	SOLENOID COVER GASKET
22	1	D5006-1	SOLENOID COVER
23	1	D5007-1	MANUAL RELEASE COVER
24	1	D5009-1	ACTUATOR SPRING
25	1	D5010-041	HOOK INTERFACE ASSY
26	1	D5011-041	HOOK SOLENOID ASSY
27	2	D5013-3	BUSHING
28	1	D5020-1	WIRE GUIDE/GRIP
29	1	D5044-1	DOWEL PIN
30	2	D5044-3	DOWEL PIN
31	2	D5045-1	SPLIT DU BEARING
32	1	D5056-1	HOOK PIN
33	2	D5057-1	NYLON WASHER
34	2	D5057-3	NYLON WASHER
35	1	D5065-1	HOOK MANUAL RELEASE LEVER
36	1	D5066-1	PLACARD
37	1	D5066-13	PLACARD

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: LASER ETCH P/N D4983-041, BATCH XX-XXXX-XX, REV. X, DOM XX/XXXX
LOCATE APPROX AS SHOWN USING APPROX LETTERING HEIGHT
AS SHOWN. PER DART EUGENE SPEC QMSI-6.2.2.
- 7) WEIGHT: 5.50 lbs
- 8) WIRING INSTALLATION PER AC43.13-1B CHAPTER 11

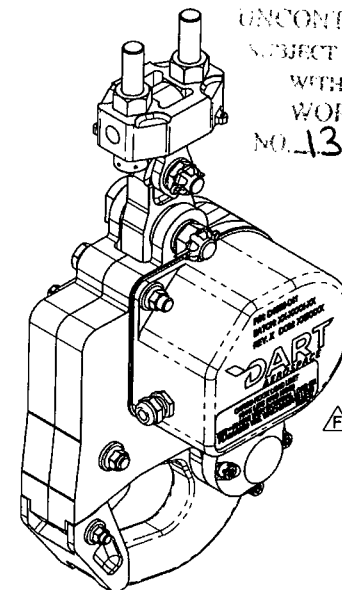
ITEM	QTY -041	P/N	DESCRIPTION
38	1	AN3C15A	BOLT
39	1	AN310C6	NUT, CASTELLATED
40	2	AN4C15A	BOLT
41	1	AN4C17A	BOLT
42	2	MS16624-4028	RETAINING RING
43	4	MS16624-5012-1	RETAINING RING
44	1	MS171532	SPRING PIN
45	3	MS21043-3	NUT, SELF-LOCKING
46	3	MS21043-4	NUT, SELF-LOCKING
47	1	MS24665-153	COTTER PIN
48	1	MS24694-C7	SCREW, CSK 100"
49	8	MS24674-9	SOCKET HEAD CAP SCREW
50	1	MS27039C1-08	SCREW, PAN-HEAD
51	4	MS35338-137	LOCK WASHER
52	5	NAS1149C0363R	WASHER
53	6	NAS1149C0463R	WASHER
54	1	NAS1149C0663R	WASHER
55	1	NAS1149C0863R	WASHER
56	1	D5116-5	WIRE M22759/41-14-9
57	1	D5116-7	WIRE M22759/41-14-9
58	1	1-480319	CONNECTOR
59	1	XPF-1/8	EXPANDABLE SLEEVE - 48" LONG
60	2	BT1.5I-M	TIE WRAP



D4983-041 CARGO HOOK ASSY

RELEASED

2015 MAR 26
A.P. ECU 15-554



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 133557 MJS
15-06-10

F	D5066-13 WAS D5066-5 (ZN A5-1, C2-1, B8-1 AND C4-3)	AK	15.03.02
E	ADDED ITEMS 56, 57, 58, 59, 60 TO BOM (ZN C5-1). ADDED NOTE 8 (ZN A8-1). UPDATED D5066-5 PLACARD (ZN A5-1, C2-1 AND C4-3). ADDED SHEET 4 (BUILD SEQUENCE 4).	AK	15.02.06
D	ITEM 50 WAS MS27039C0814 (DRAFTING ERROR). ADDED NOTE 6.	AJS	14.12.15
C	PICTORIAL UPDATE FOR CHANGES TO D5010-041 SUB ASSY. PICTORIAL UPDATE TO ITEM 28. ADDED ITEM 37 & 38. QTY FOR ITEM 44 WAS 4 (-9 DELETED). REDESIGNED D4985-041, D5007-1 AND D5065-1 AND UPDATED RELATED HARDWARE LENGTHS. ALL NASM HARDWARE REPLACED WITH AN/MS HARDWARE.	AJS	14.06.24
B	SHT 1 PARTS LIST: ITEM 42 WAS -151. ADDED ITEM 43. QTY FOR ITEM 44 WAS 8. ITEM 47 PART NUMBER WAS NAS1149C0832R. ITEM 51 PART NUMBER WAS NAS1149C0816R. ITEM 52 PART NUMBER WAS NASM24694-C4. REASON: DRAFTING ERROR.	AJS	14.03.13
A	NEW ISSUE	AJS	14.02.18
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	RF	DRAWING NO.	REV. F
MFG. APPR.	JLM	D4983	SHEET 1 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS-4	CARGO HOOK ASSY	NTS
DATE	15.03.02	COPYRIGHT © 2014 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

APPROVED

DQA: _____ Date: _____

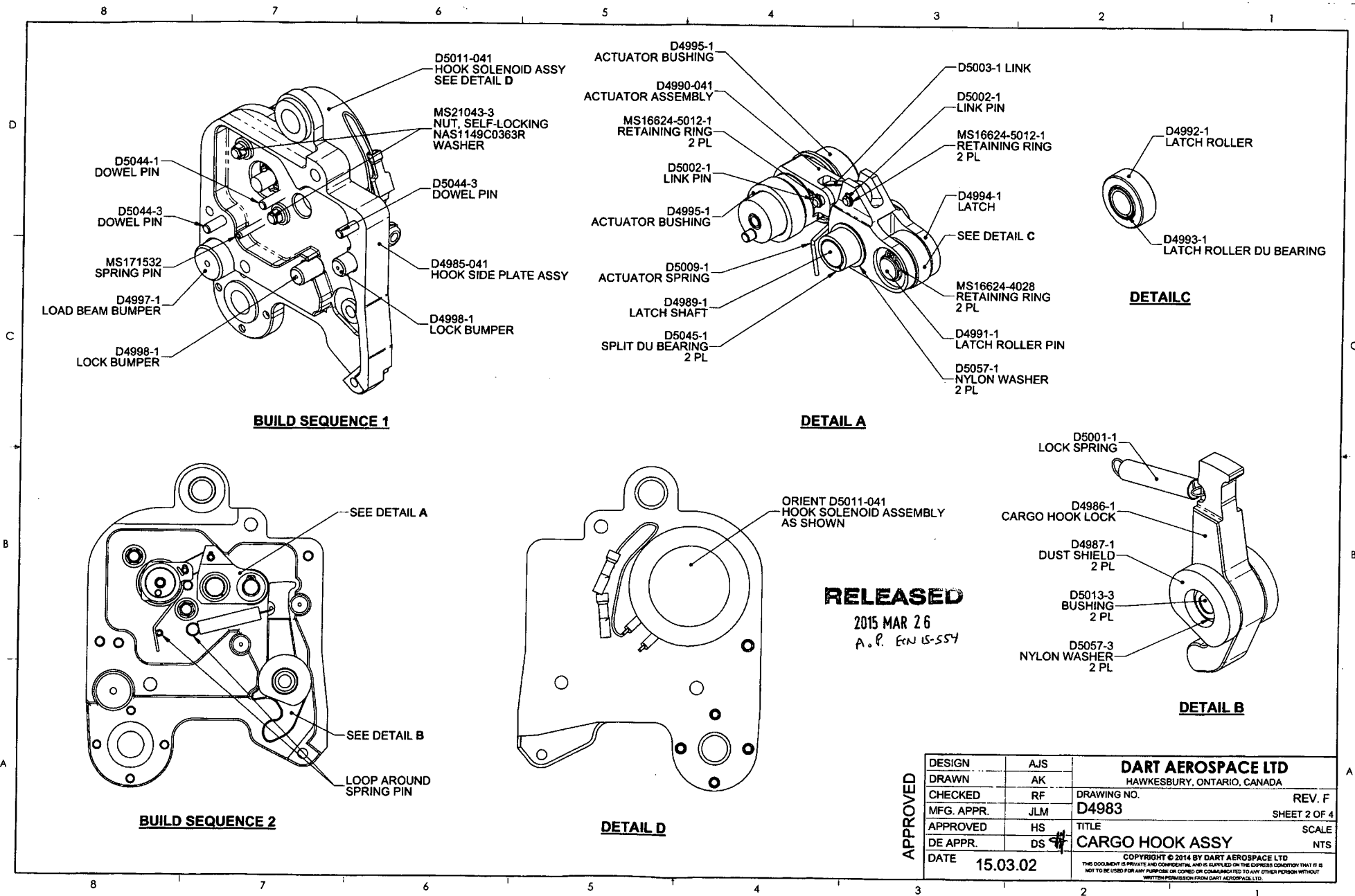


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					



RELEASED

2015 MAR 26
A.P. EN 15-554

APPROVED

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	RF	DRAWING NO. D4983	REV. F
MFG. APPR.	JLM	SHEET 2 OF 4	
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CARGO HOOK ASSY	NTS
DATE	15.03.02	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DQA: _____ Date: _____

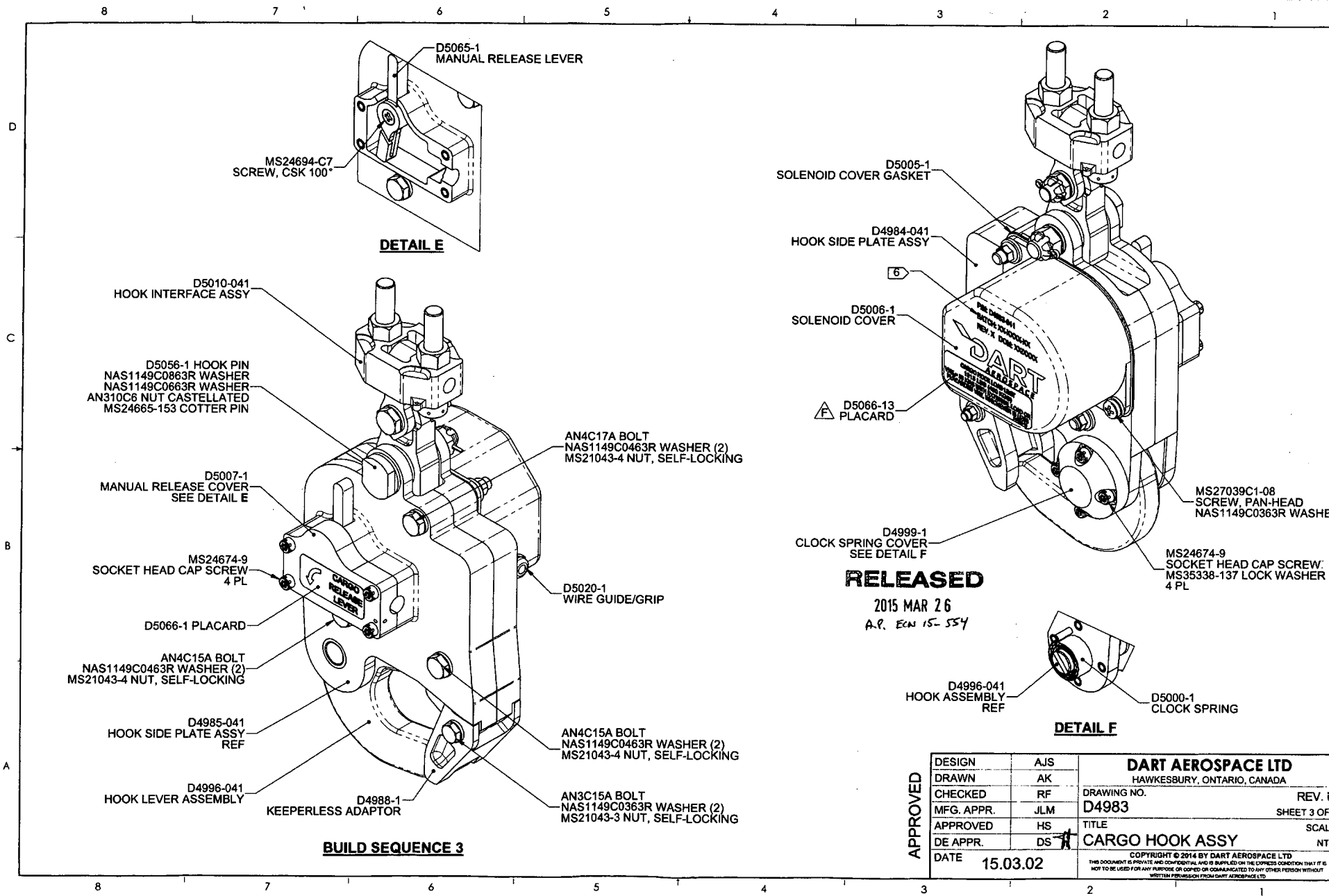


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																	
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OTHER :																																																																					



APPROVED	DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	AK		
	CHECKED	RF	DRAWING NO. D4983	REV. F
	MFG. APPR.	JLM	SHEET 3 OF	
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	CARGO HOOK ASSY	NT
DATE	15.03.02		COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPILED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

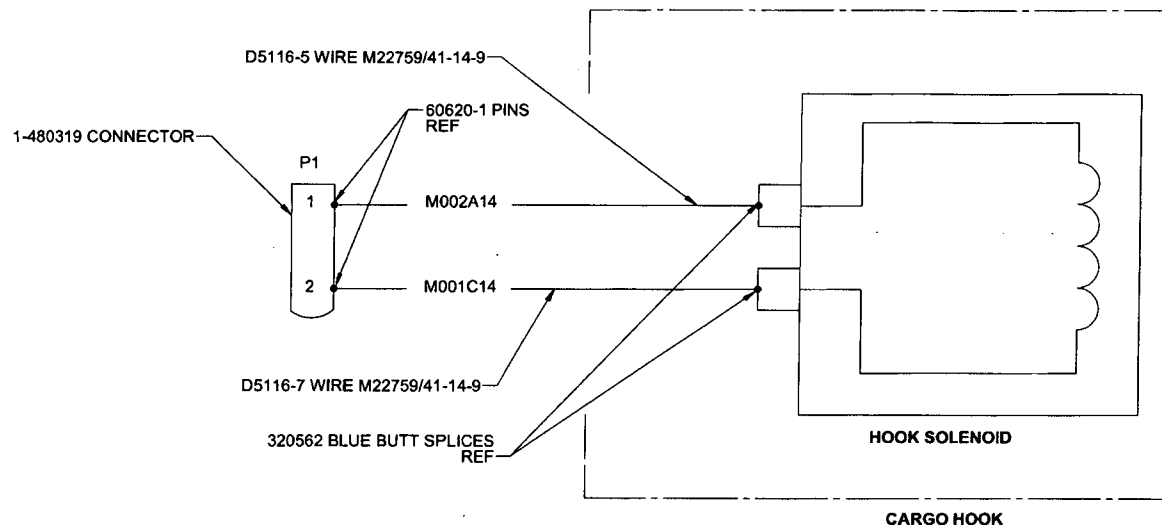
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval 	
Description Work Order Deviation		Disposition			
				Completed By 	
				Lead hand / Supervisor Approval Verification 	
				QC / QA Coordinator Approval 	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

BUILD SEQUENCE 4 INSTRUCTIONS:

1. REMOVE D5006-1 SOLENOID COVER
2. INSTALL PINS ON THE D5116-5/-7 WIRES TO THE 1-480319 CONNECTOR. SEE FIGURE BELOW FOR DETAILS
3. INSTALL XPF-1/8 EXPANDABLE SLEEVE AT THE CONNECTOR END AROUND D5116-5/-7 WIRES AND SECURE USING A SMALL TIE WRAP
4. INSTALL D5116-5/-7 WIRES AND XPF-1/8 EXPANDABLE SLEEVE THROUGH D5020-1 WIRE GUIDE/GRIP ON THE SOLENOID COVER
5. INSTALL TIE WRAP ON EXPANDABLE SLEEVE AND WIRES INSIDE D5006-1 SOLENOID COVER
6. CONNECT D5116-5/-7 WIRES TO SOLENOID WIRES USING 320562 BLUE BUTT SPLICES
7. RE-INSTALL D5006-1 SOLENOID COVER
8. TIGHTEN D5020-1 WIRE GUIDE/GRIP



BUILD SEQUENCE 4

RELEASED

2015 MAR 26

A.P. Ecn 15-554

APPROVED

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	RF	DRAWING NO. D4983	REV. F SHEET 4 OF 4
MFG. APPR.	JLM	TITLE	SCALE
APPROVED	HS	CARGO HOOK ASSY	
DE APPR.	DS	NTS	
DATE	15.03.02	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29013**

Purchase Order Date 7/2/2015 1:26:29 PM

PO Print Date 8/17/2015

Page Number 1 of 3

Order From :

VU-RED001

Ship To : DART AEROSPACE LTD

RED BARN MACHINE INC.
190 S DANEBO AVE.
EUGENE, OR 97402
USA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED

Contact Name

Vendor Phone 541-344-9953

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Ship To Contact

Terms

Net 30

Ship To Phone

Currency

USD

Ship Via:

FedEx Overnight collect

FOB

Destination-Collect

Ship Acct:

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
----------	---	------------------------	--------------------------------------	----	--------------------------------	---------------	-------------------

1	D4983-041P	Cargo Hook Assembly	8/21/2015 Yes 8/21/2015	FN	10.00 Each	\$1,500.00	\$15,000.00
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AS PER DWG D4983 REV. F

B133553,B133554,B133555,B133556,B133557,B133558,B133559,B133560,B133561,B133562

SP15-08-17

Line Total: \$15,000.00

2	D5051-041P	Cyclic Switch Housing Assembly	8/21/2015 Yes 8/21/2015	FN	10.00 Each	\$300.00	\$3,000.00
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AS PER DWG D5051 REV. C

B133563

Line Total: \$3,000.00

Note:

8/17/2015



Pack Slip: 18559
18559

Pack Slip

Page: 1 of 1

Ship To:

DART AEROSPACE LTD.
1270 ABERDEEN STREET
HAWKESBURY ONTARIO K6A 1K7
CANADA

Phone: 800-556-4166
Fax: 714-755-2995

Sold To: CHANTAL LAVOIE
DART AEROSPACE LTD.
1270 ABERDEEN STREET
HAWKESBURY ONTARIO K6A 1K7
CANADA

Phone: 800-556-4166
Fax: 613-632-4443
dkennedy@dartaero.com

Ship Date: 8/14/2015

Ship Via: FEDEX P1 COLLECT

F.O.B.: EUGENE, OR

Order: 16618

PO: 29013

Salesperson: ERIC BACON

DART ACCT

PO	Line	Price	Qty	Unit Price	Part Number	Description	Rev
	10.00	10.00	1	10.00	D4983-041P	CARGO HOOK ASSEMBLY	F
	10.00	10.00	1	10.00	D5051-041P	CYCLIC SWITCH HOUSING ASSEMBLY	
	10.00	10.00	1	10.00	D5066-3P	CARGO HOOK PLACARDS	
	10.00	10.00	1	10.00	D5066-5P	CARGO HOOK PLACARDS	
	10.00	10.00	1	10.00	D5066-7P	CARGO HOOK PLACARDS	
	10.00	10.00	1	10.00	D5066-9P	CARGO HOOK PLACARDS	

SP15-08-17

Dart Aerospace hereby certifies that all materials used in the manufacturing of our tools are new and meets all specifications called out in all applicable blueprints and drawings. All standard machining and manufacturing procedures are strictly followed.

Signed

PackSlip:8.03:01

190 S. Danebo Avenue
Eugene, OR, USA 97402
dartaerospace.com

T 1 541 344-9953
F 1 541 344-3863

Sales
T 1 800 556-4166
F 1 613 632-4443
E sales@dartaero.com

Mission
Ready.



190 S Danebo Ave
Eugene, OR 97402
USA
Tel: 541.334.9953
Fax: 541.344.3863

Certificate of Conformance

Customer: DART Aerospace LTD. (Hawkesbury)

Purchase Order: 29013

Part Number	Description	Quantity	Batch
D4983-041P	Cargo Hook Assembly	1	01-16263-A-11
D4983-041P	Cargo Hook Assembly	1	01-16263-A-12
D4983-041P	Cargo Hook Assembly	1	01-16263-A-13
D4983-041P	Cargo Hook Assembly	1	01-16263-A-14
D4983-041P	Cargo Hook Assembly	1	01-16263-A-15
D4983-041P	Cargo Hook Assembly	1	01-16263-A-16
D4983-041P	Cargo Hook Assembly	1	01-16263-A-17
D4983-041P	Cargo Hook Assembly	1	01-16263-A-18
D4983-041P	Cargo Hook Assembly	1	01-16263-A-19
D4983-041P	Cargo Hook Assembly	1	01-16263-A-20

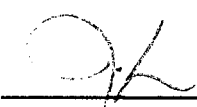
Packing Slip Number: 18559

8015-08-17

ALL MATERIALS, PARTS, COMPONENTS HAVE BEEN INSPECTED AND HAVE BEEN MANUFACTURED TO THE DRAWINGS LISTED ON :

D4983 Rev F

Date of MFG 5-16-2015

Approved By: 

Date: 8-10-2015

Quality Assurance Manager

190 S. Danebo Avenue
Eugene, OR, USA 97402
dartaerospace.com

T 1 541 344-9953
F 1 541 344-3863

Sales
T 1 800 556-4166
F 1 613 632-4443
E sales@dartaero.com

Mission
Ready.